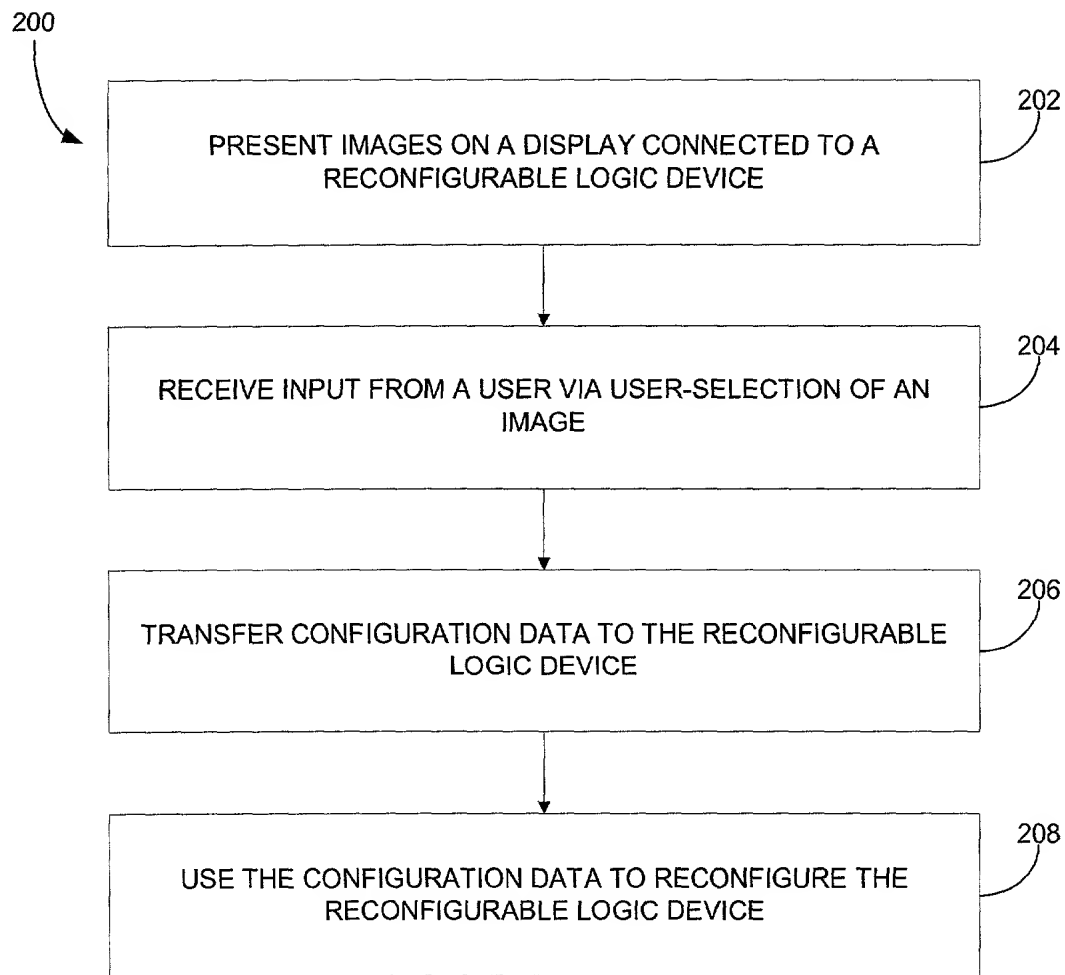


**Fig. 1**



**Fig. 2**

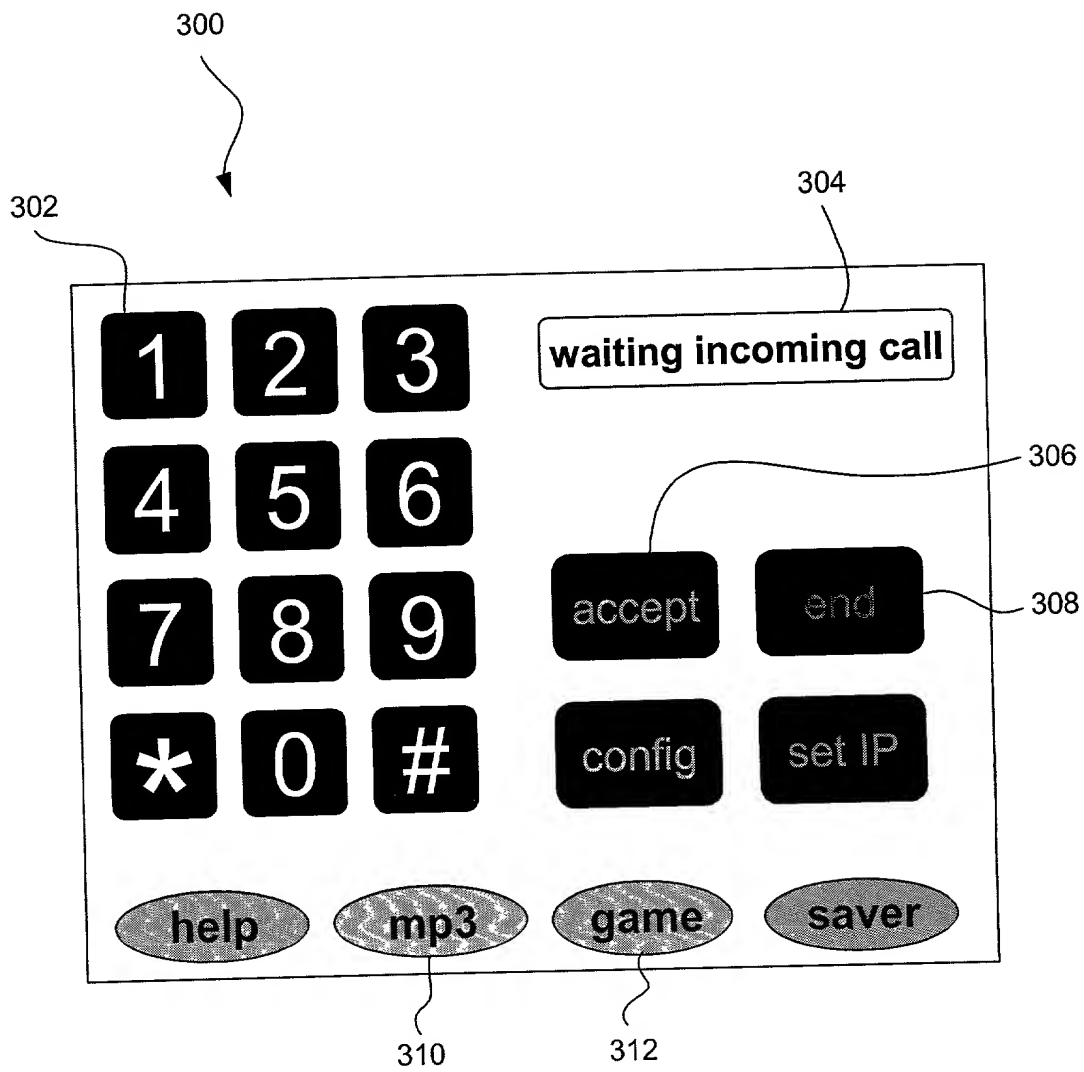
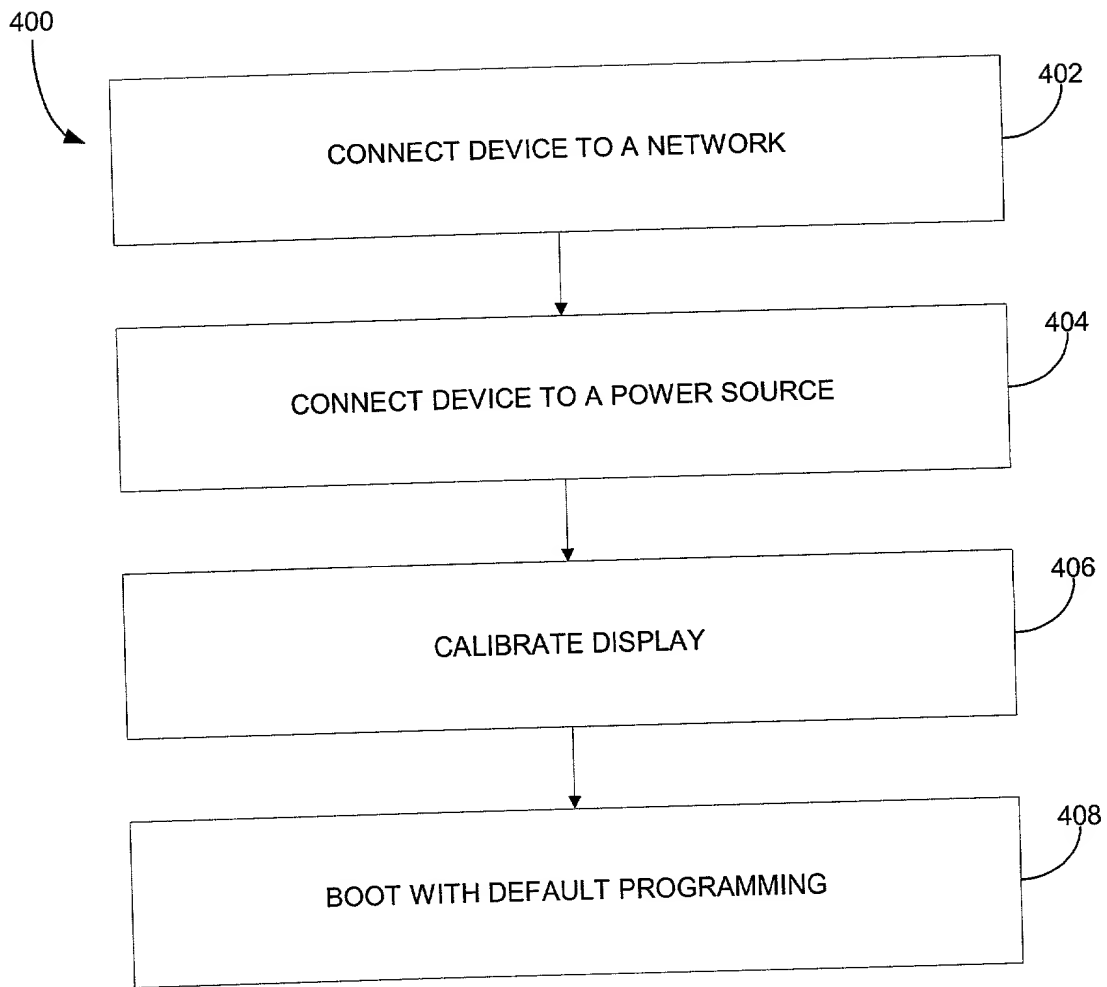


Fig. 3



**Fig. 4**

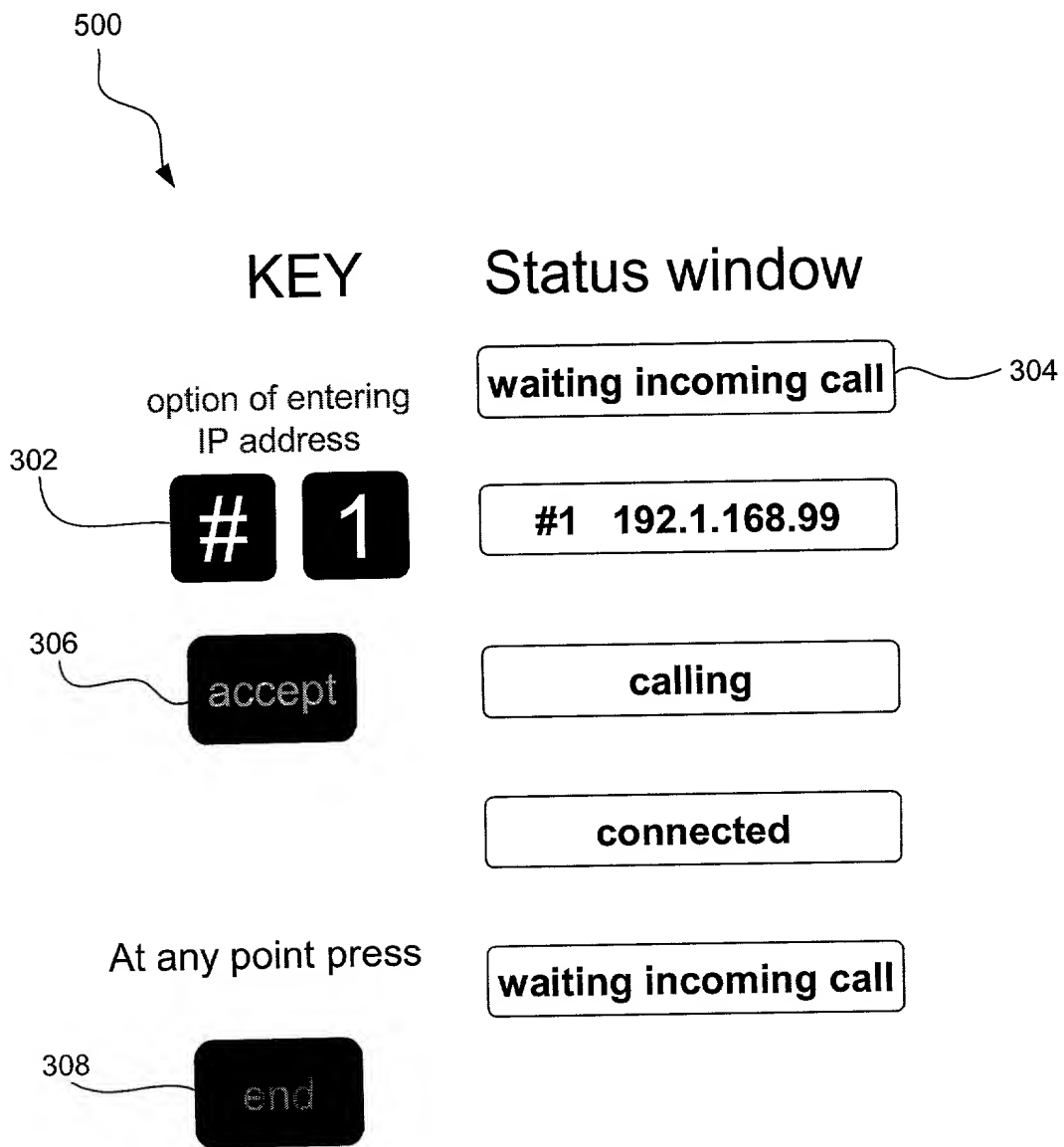


Fig. 5

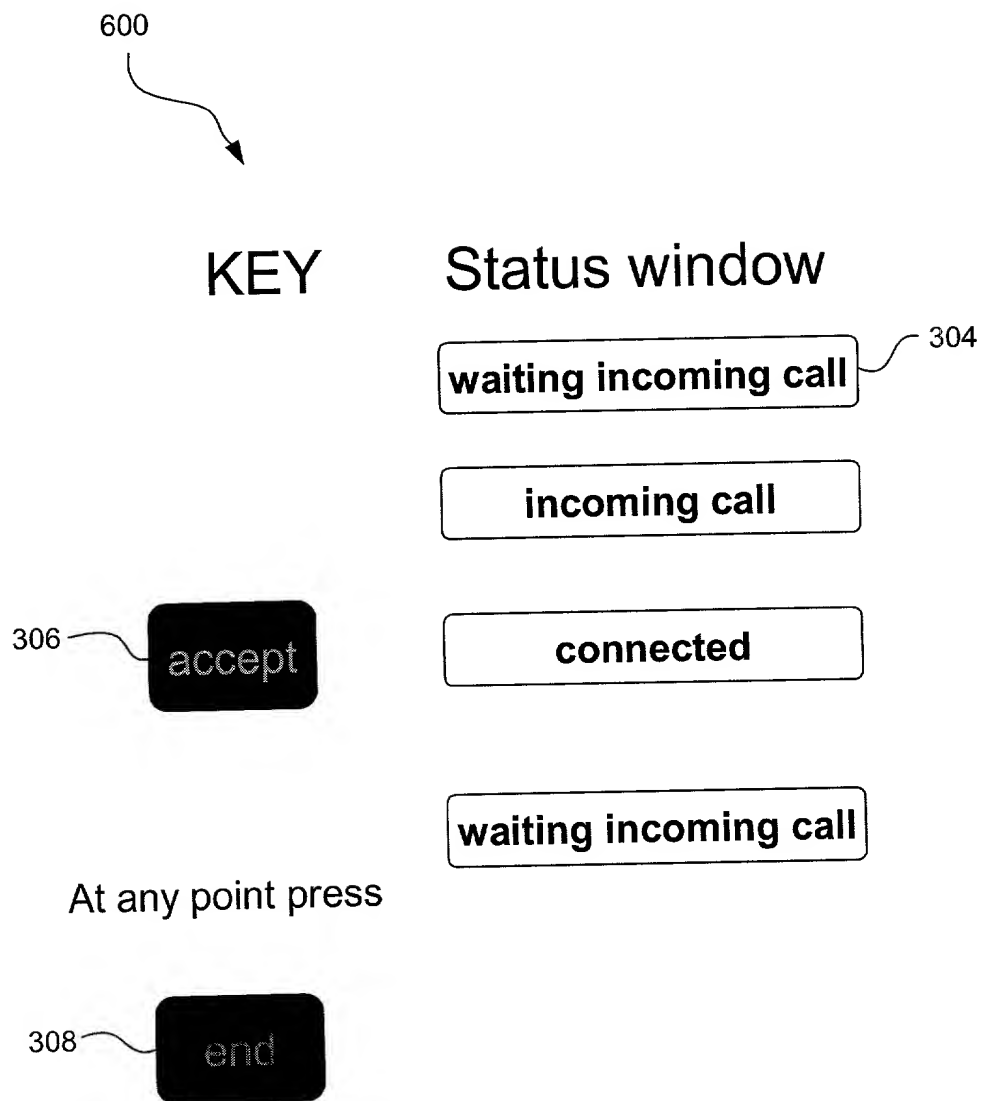


Fig. 6

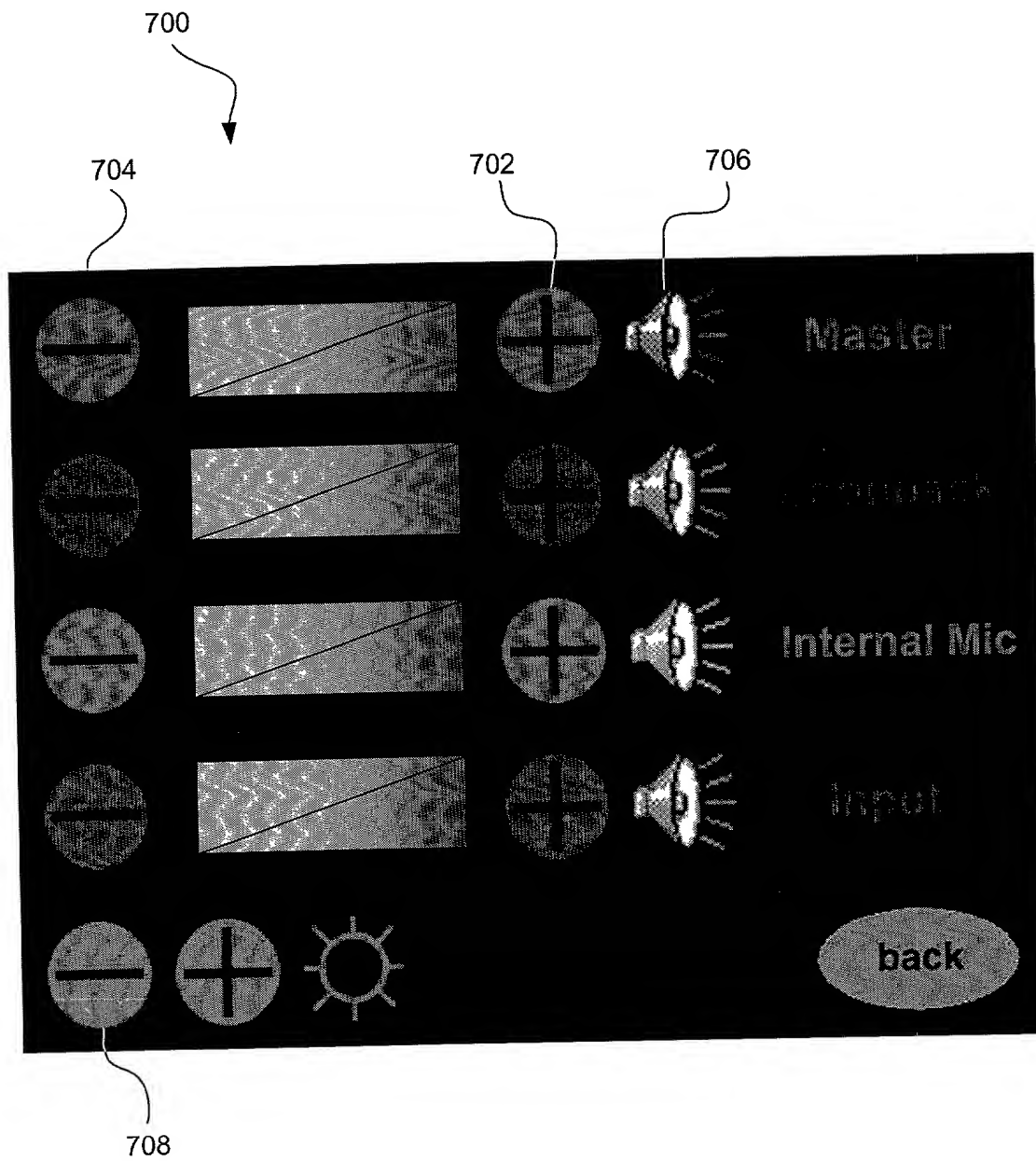


Fig. 7

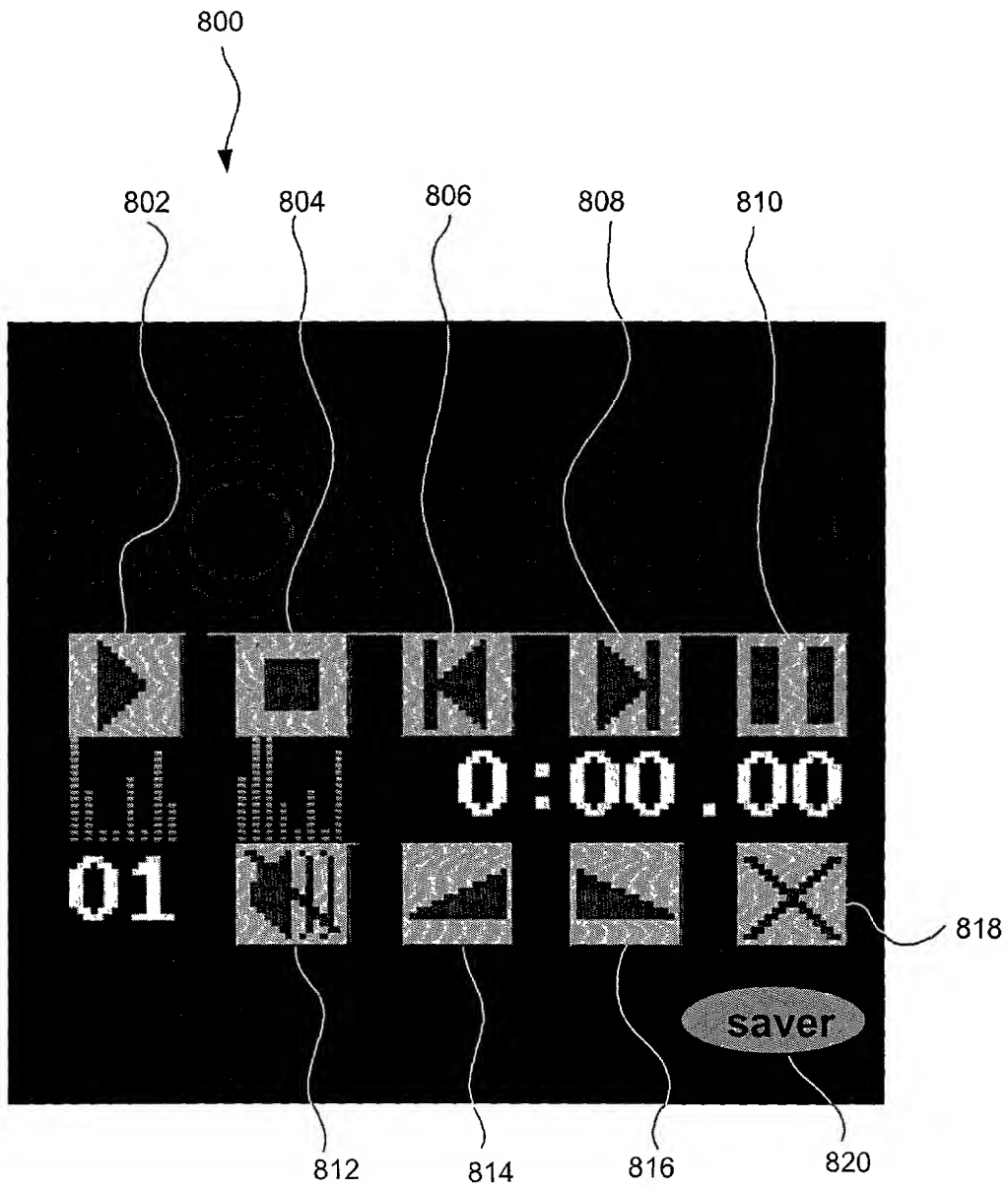
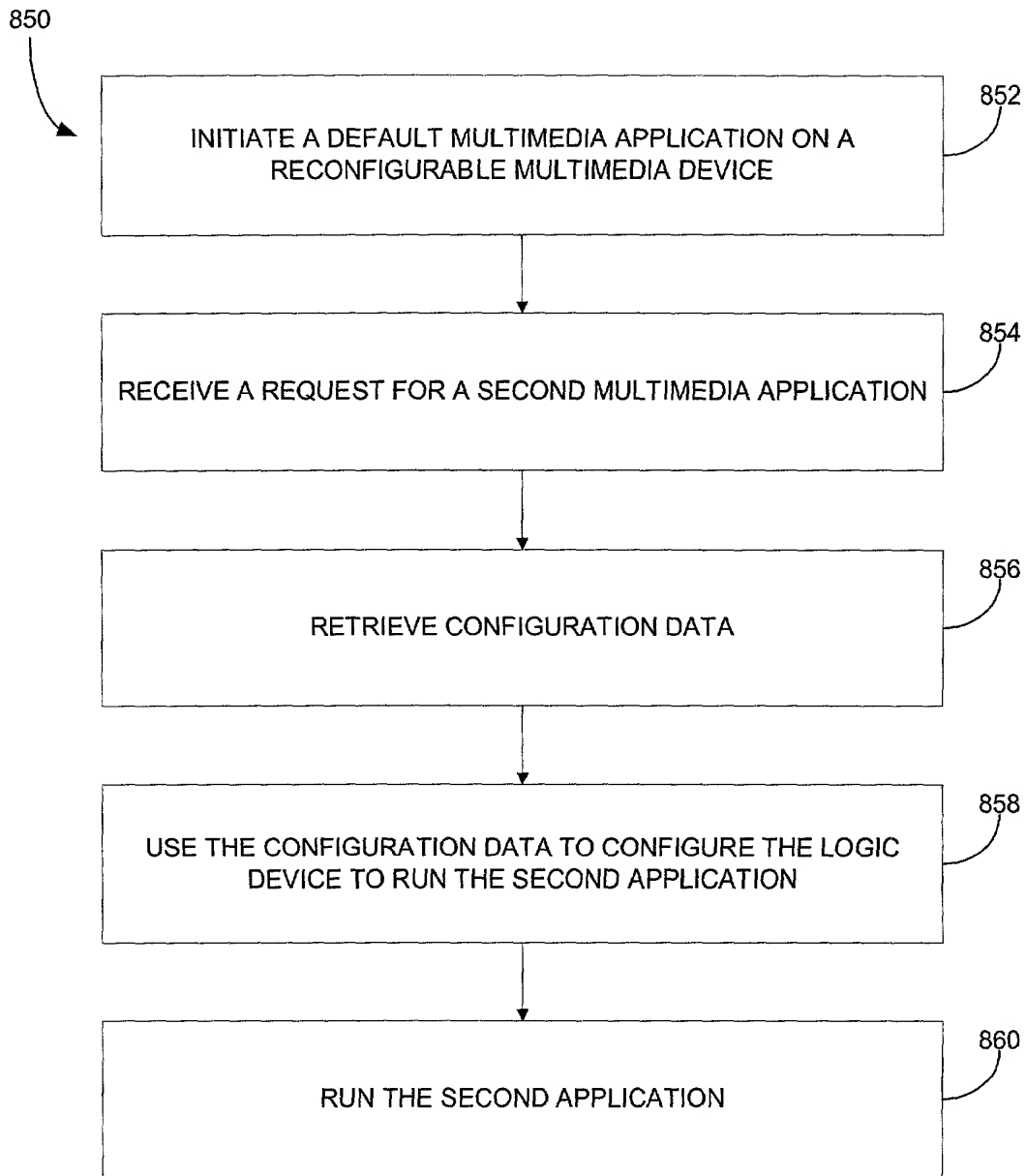
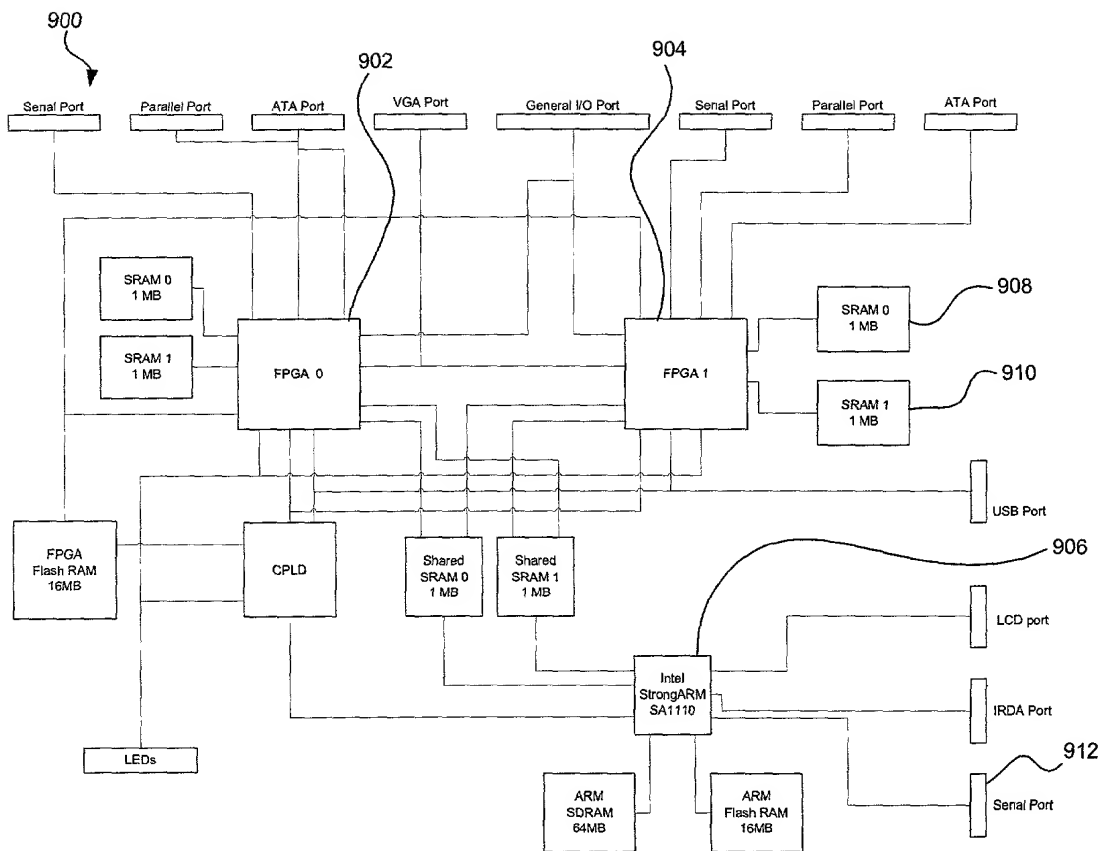


Fig. 8A





**Fig. 8B**



**Fig. 9**

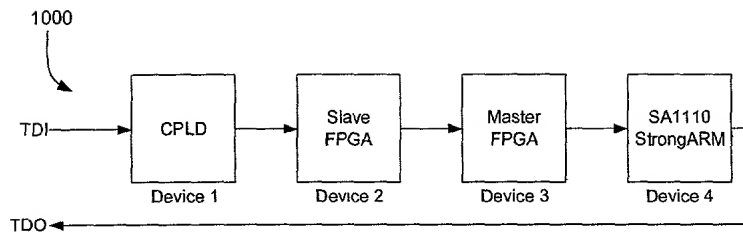


Fig. 10

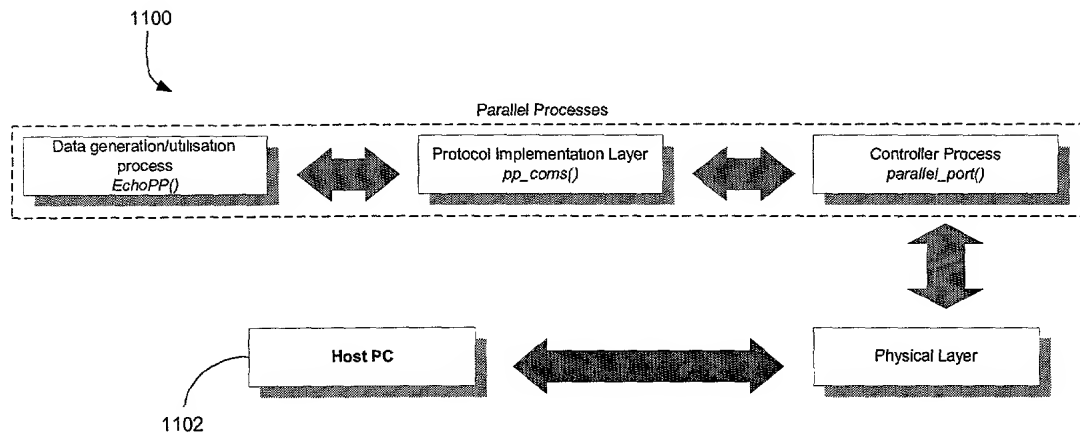


Fig. 11

1200

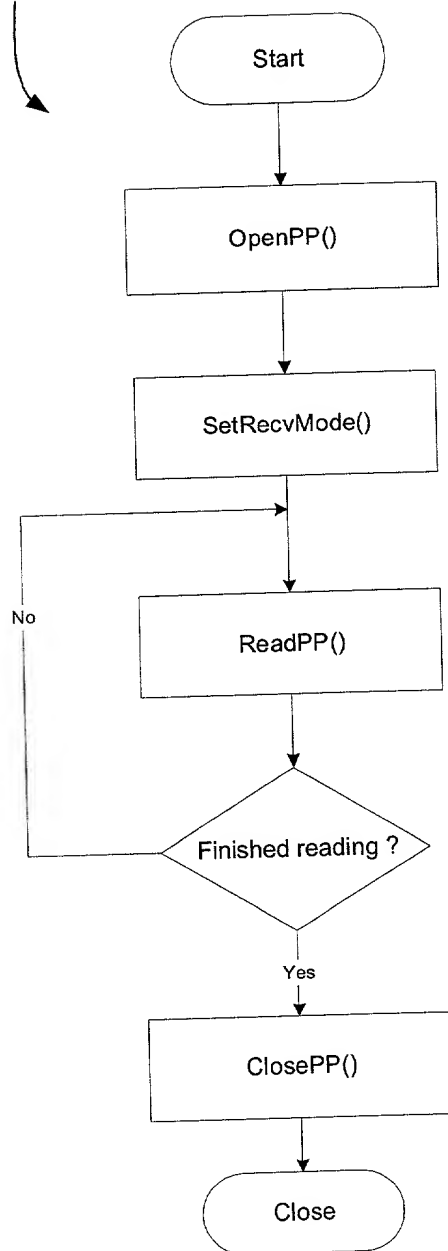


Fig. 12

1300

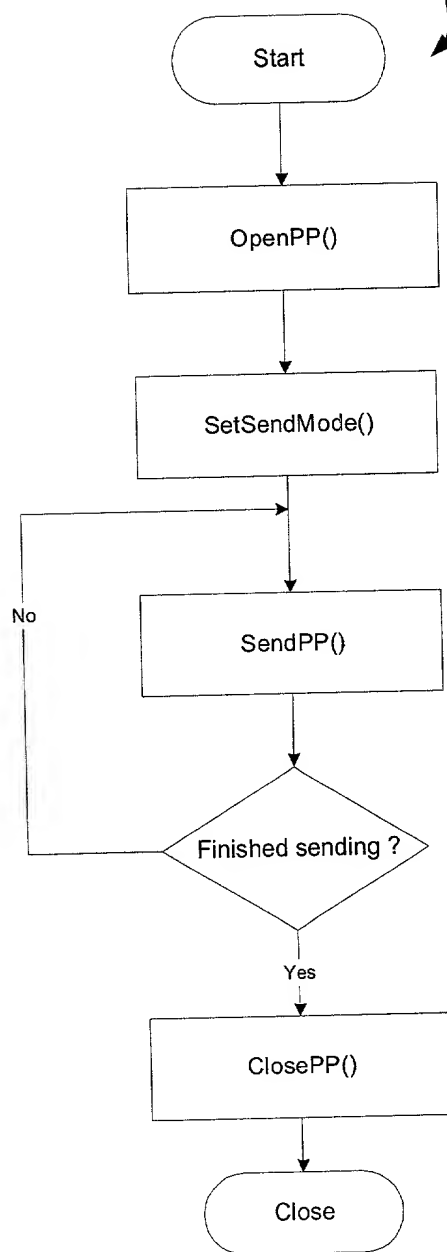


Fig. 13

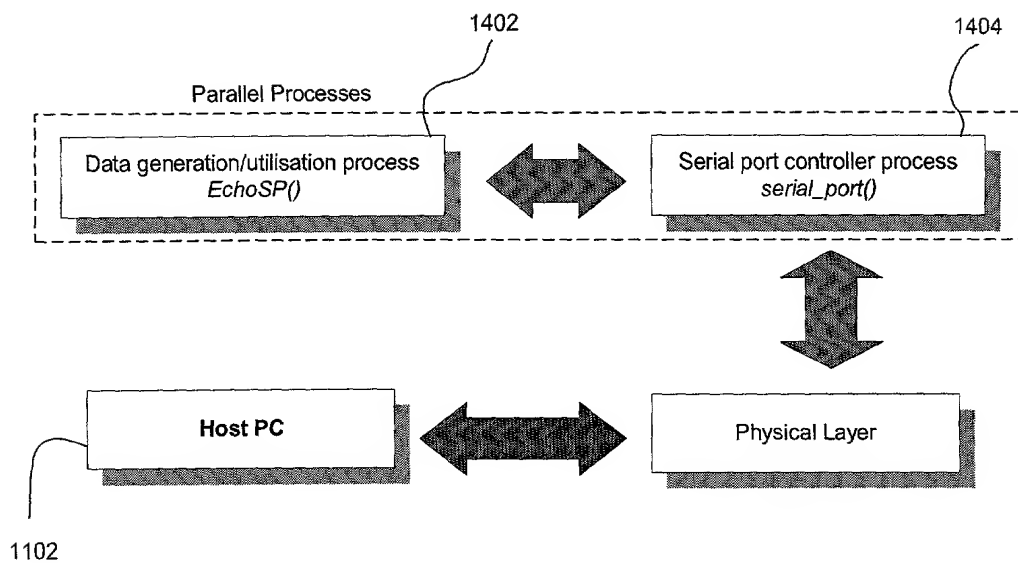
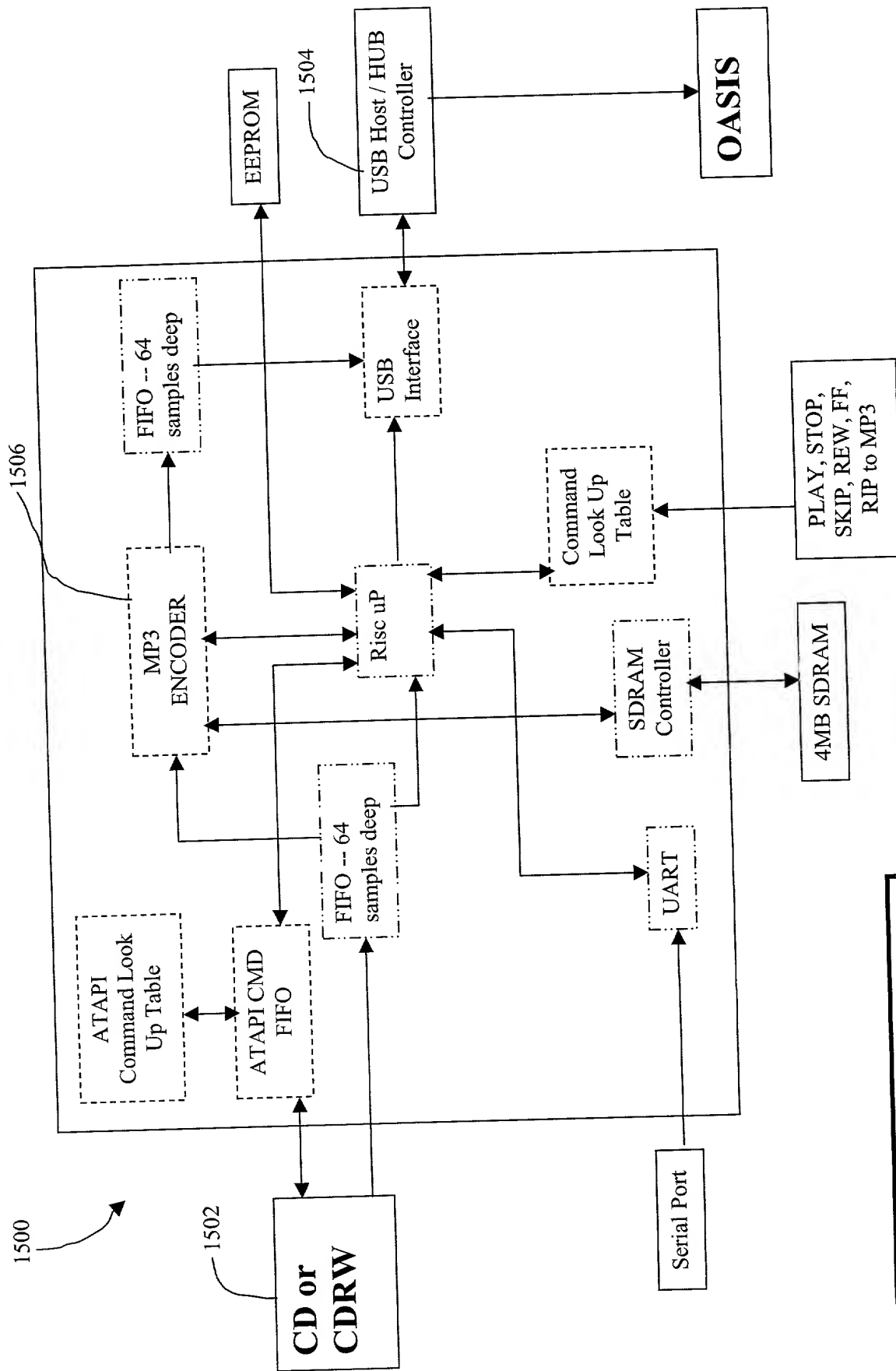


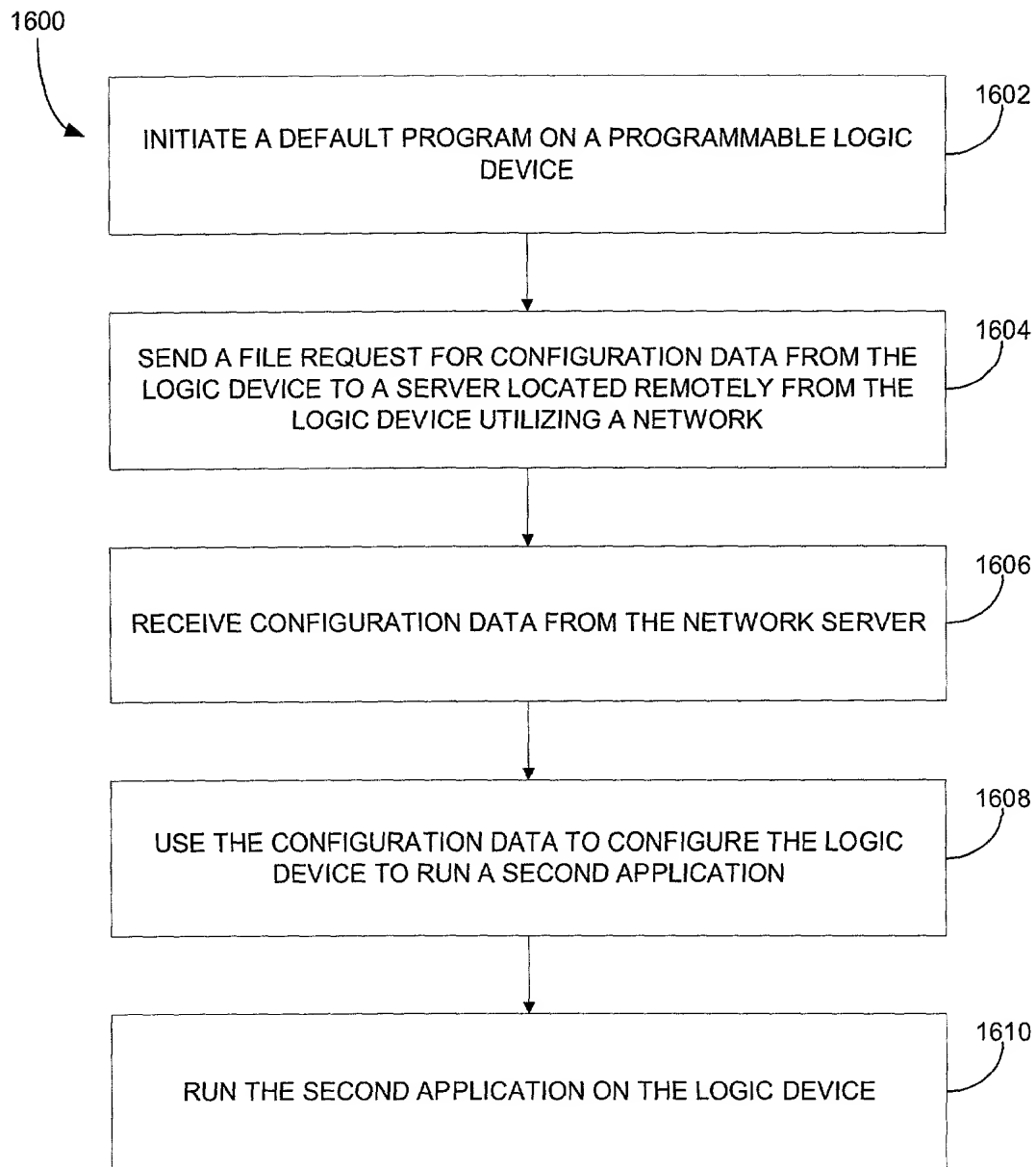
Fig. 14



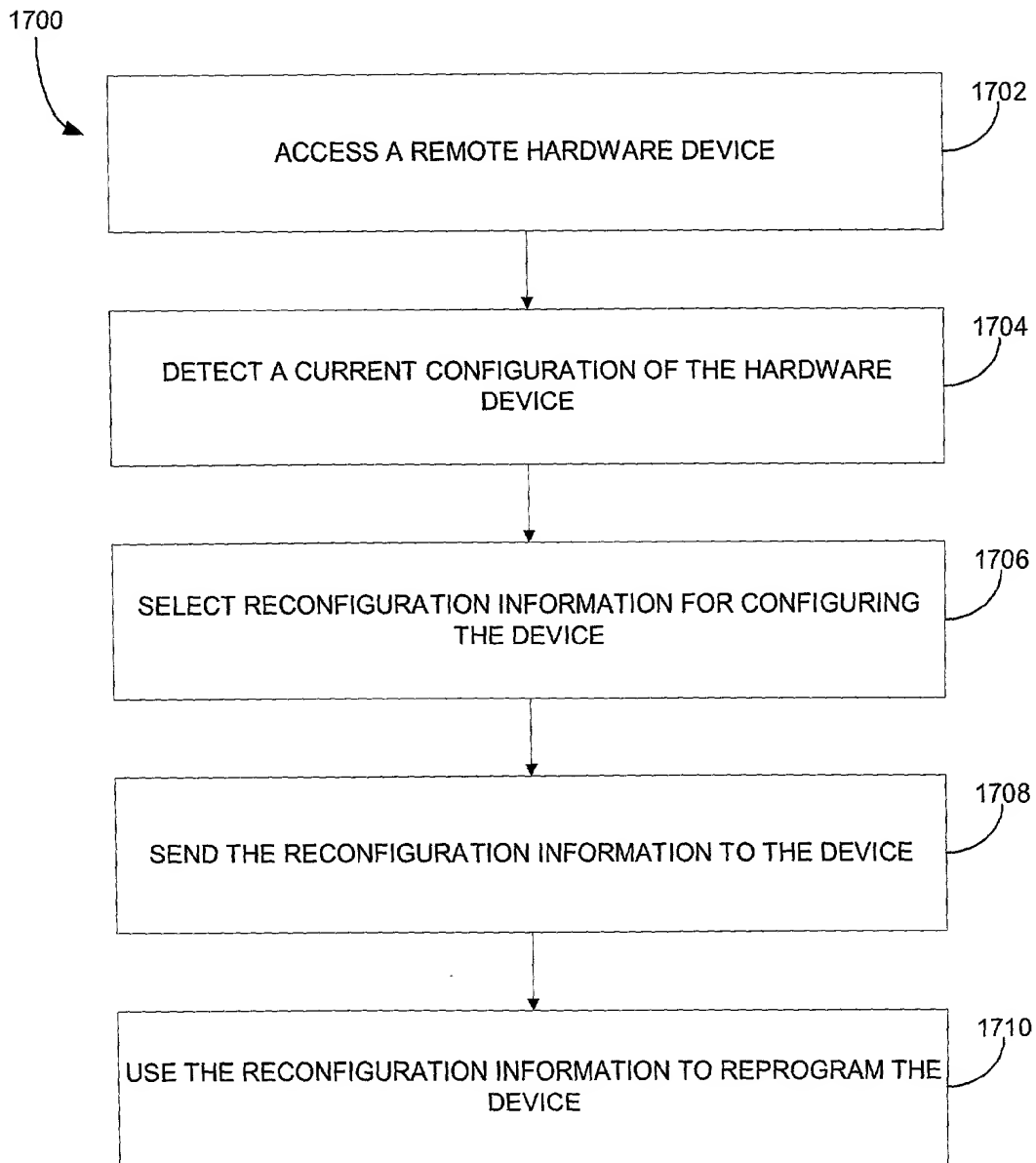
LEGEND:

- Off the shelf components
- Logic
- IP Core from Xilinx

Fig. 15

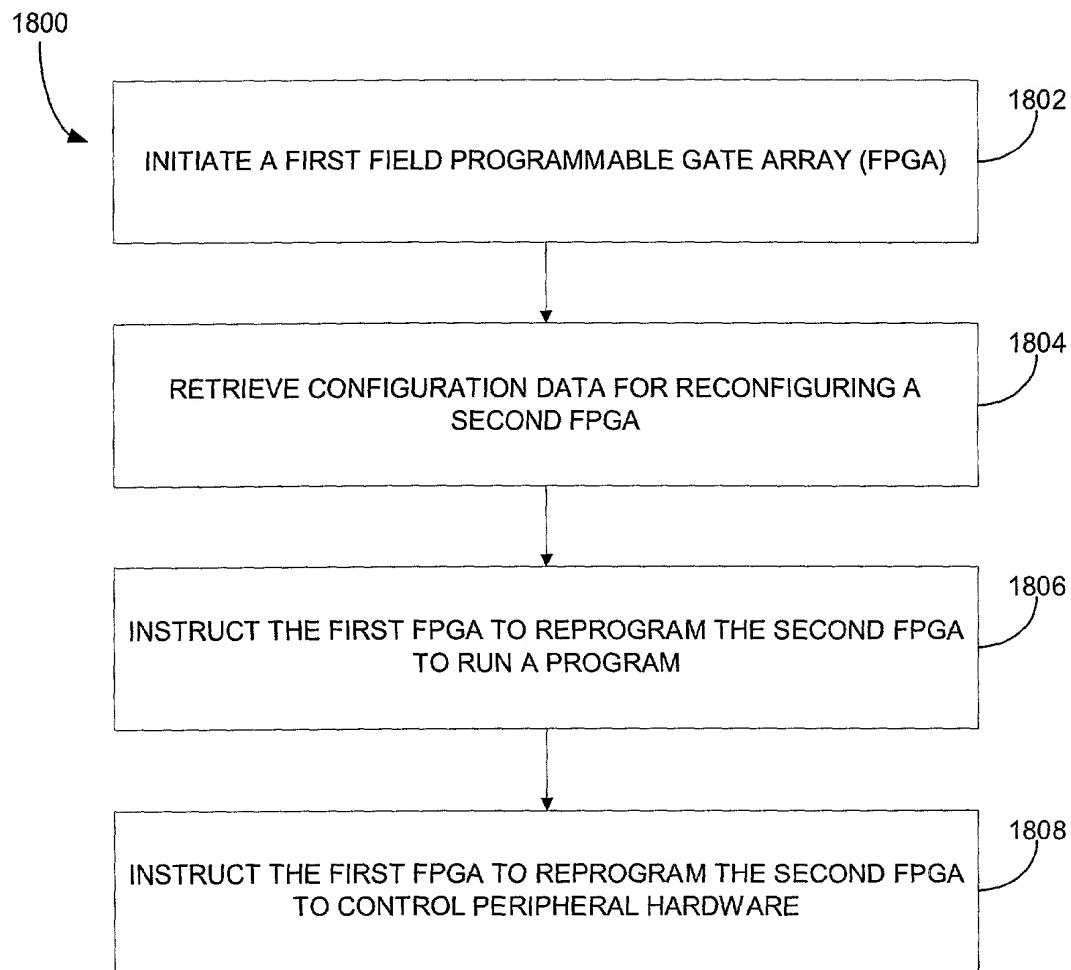


**Fig. 16**



**Fig. 17**





**Fig. 18**